



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/674,077

10/26/2000

Hideyuki Kimura

107714

1563

25944 7590 02/12/2008

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

02/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/674,077	Applicant(s) KIMURA ET AL.	
	Examiner MARC A. PATTERSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/20/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 12-14, 22, 23 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-14, 22, 23 and 26-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NEW REJECTIONS

Claim Rejections – 35 USC § 102(b)

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 - 2, 22, 24, 26, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al (U.S. Patent No. 5,193,711) in view of Moore (U.S. Patent No. 5,954,223).

With regard to Claims 1 and 22, Hirata et al disclose a body which is molded and is a container (column 4, lines 53 - 55) and cylindrical (circular; column 5, lines 65- 66) and therefore has a sidewall portion having an inner surface and an outer surface and an upper opening, and comprises a sheet shaped insert, which is a label which is forced between a core and a cavity of a mold, and therefore inserted between the core and cavity (column 5, lines 41 - 45) having an upper edge and lower edge (the label has a lower end, and therefore an upper end; column 5, lines 41 - 45); resin is injected into the space between the core and the cavity and is unified with the insert, allowing the insert to be bonded to the outer side of the wall of the body (column 5, lines 41 - 45), therefore bonded to the outer surface of the body; the body is therefore insertion molded; the container comprises a thickened area which is formed by the resin and which is less than the full height of the container (the thickened area is formed by cut surfaces in the core which are less than the full height of the container, therefore closer to the upper edge

Art Unit: 1794

that the lower edge as shown in Figure 12; the thickened area is shown in Figure 13; column 7, lines 15 - 20); which is positioned at the inner surface of the sidewall portion (the cut surface of the core is in the side wall of the core as shown in Figure 21); because the resin of the thickened area is injected, the thickened area is formed by an injection gate opening, and is therefore an injection gate mark and is formed by injection; because the thickened area is less than the full height of the container, the thickened area is a mark that is inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert. Hirata et al fail to disclose a container having a bottom opening.

Moore teaches a container that is provided with a bottom opening for the purpose of draining water from the container (column 4, lines 36 - 43). One of ordinary skill in the art would therefore have recognized the advantage of providing for the bottom opening of Moore in Hirata et al, which comprises a container, depending on the desired drainage of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a bottom opening in Hirata et al in order to obtain a container from which water may be drained as taught by Moore.

With regard to Claim 2, Hirata et al disclose a gap on the outer surface positioned between opposed ends of the insert and not covered by the insert (between sidewall sections of the insert as shown in Figure 3; column 4, lines 56 - 60).

With regard to Claim 24, the Hirata et al disclose a Container comprising one bottom wall, instead of multiple bottom wall, as shown in Figure 1A, and therefore is formed without a bottom wall.

With regard to Claim 26, because resin is injected into the space between the core and the cavity and is unified with the insert, the insert is bonded to an entire surface of the outer surface of the sidewall portion, excluding a mouth portion of the cylindrical molded body.

With regard to Claims 28 and 30, the claimed aspect of the article being made by a method comprising fitting, attaching and holding the insert along the inner surface of the outer molding unit in the molding cavity is directed to a product - by - process limitation and is therefore given little patentable weight.

3. Claims 3 - 6, 12 - 14, 23, 25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al (U.S. Patent No. 5,193,711) in view of Moore (U.S. Patent No. 5,954,223) and Suzuki et al (Japanese Patent No. 6246777) and Asasi Chemical (Japanese Patent No. 03286815).

Hirata et al and Moore disclose an insertion and injection molded article comprising an insert and injected resin as discussed above. The mold comprises a mold cavity, therefore an outer mold unit, and core, as discussed above, therefore a core shaped to be inserted and fitted into the outer mold unit, and a cavity between the outer mold unit and the core; the core also comprises an injection gate opening (groove; column 6, lines 65 - 67); the insert is placed between the core and cavity, as discussed above, and is therefore fitted attached and held along the inner surface, and resin is injected toward the molded body inner surface; the insert is also pushed onto the inner surface with the resin (the resin forces the side Wall section against the cavity side; column 5, lines, 49 - 52) and therefore shapes the resin. With regard to Claims 3, 23

Art Unit: 1794

and 25, Hirata et al fail to disclose a core which is a pull - out mold unit and a resin which is cured following injection.

Suzuki et al teach the use of a mold unit which is a pull - out mold unit (pulled out of the space; paragraph 0025, English translation) for injection molding, for the purpose of molding a container (paragraph 0004, English translation). One of ordinary skill in the art would therefore have recognized the advantage of providing for the pull - out mold unit of Suzuki et al in Hirata et al, which comprises insertion and injection molding; depending on the desired adhesion to both layers of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a pull - out mold unit, therefore a core which is a pull - out mold unit, in Hirata et al and Moore in order to obtain a container as taught by Suzuki et al.

Asahi Chemical teaches that thermoplastic resins and thermosetting resins are used alternatively in the making of containers for the purpose of making a container having a good appearance (English Abstract). Therefore, one of ordinary skill in the art would have recognized the utility of providing for the thermosetting resin taught by Asahi Chemical, rather than a thermoplastic resin, in Suzuki et al, which is a container, depending on the desired surface appearance of the end product as taught by Asahi Chemical.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a thermosetting resin in Suzuki et al in order to make a container having a good appearance as taught by Asahi Chemical, thus providing

Art Unit: 1794

for a resin which continuously cures throughout the molding process of Suzuki et al including the step following injection.

With regard to Claim 4, as stated above, Hirata et al disclose a gap on the outer surface positioned between opposed ends of the insert and not covered by the insert; molten resin is therefore not injected toward the gap.

With regard to Claims 5, 12, 27 and 29, a knock out pin is provided in the core disclosed by Suzuki et al (ejection pin; paragraph 0011, English translation), and the Suzuki et al further disclose pulling Out the pull - out mold unit of the outer mold unit after insertion molding (paragraph 0025, English translation and cutting a connection between the cured resin inside an injection gate opening and a molded body by raising the knock, out pin (the ejection pin is raised, eliminating thermoplastics remaining between the core and runner, thus cutting the connection between molded body and the knock - out pin, and forming a mark left by the injection gate; paragraph 0011, English translation) and removing the body by pushing the bottom portion of the body (the fabricated compound container is taken out from the core by moving upwards the stripper plate with which its bottom portion is in contact (paragraph 0022, English translation; Figure 9).

With regard to Claims 6 and 13 - 14, as discussed above, the insert disclosed by Hirata et al is fitted, attached and held in a cylindrical shape along the inner surface of the outer mold unit; the mold unit is a pull - out mold unit as discussed above, and a contact frictional force is therefore applied by placing the insert in a cylindrical shape into the outer mold unit while the core of the injection molding mold is pulled out from the outer mold unit.

ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 1 - 2, 22, 24, 26, 28 and 30 as being unpatentable over Hirata et al (U.S. Patent No. 5,193,711) in view of Moore (U.S. Patent No. 5,954,223), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 10 of the remarks dated November 20, 2007, that the term 'gate mark' is widely known in the field of injection molding, and has used in over 100 patents.

However, as stated above, because the term 'gate' refers to an injection gate in the method of making the claimed article, and because the thickened area of Hirata et al is formed by an injection gate, the term 'gate mark' does not exclude the thickened area of Hirata et al; furthermore, it is not clear that the term 'gate mark' has been used to define a structural feature in a product claim of a previous patent.

Applicant also argues, on page 11, that Hirata et al do not disclose a molten resin that passes through an injection gate opening in a direction toward the inner surface of the sidewall portion because the resin disclosed by Hirata et al travels through a plane of the opening traveling downwardly.

However, the claim limitation 'a direction toward the inner surface of the sidewall portion' does not limit the direction of travel to a sideways, as opposed to downward direction, because a sideways direction is not claimed.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/
Primary Examiner, Art Unit 1794